

0000105741

ORIGINAL

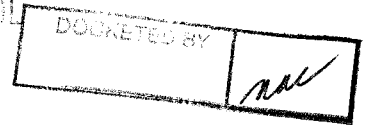
## BEFORE THE ARIZONA CORPORATION COMMISSION

WILLIAM A. MUNDELL  
CHAIRMAN  
JIM IRVIN  
COMMISSIONER  
MARC SPITZER  
COMMISSIONER

2002 APR -5 P 1:50

DOCKETED

APR 05 2002

AZ CORP COMMISSION  
DOCUMENT CONTROL

IN THE MATTER OF U S WEST  
COMMUNICATIONS, INC.'S  
COMPLIANCE WITH SECTION 271  
OF THE TELECOMMUNICATIONS  
ACT OF 1996

Docket No. T-00000A-97-0238

RESPONSE OF THE COMMISSION STAFF  
TO AT&T'S MOTION TO REOPEN THE RECORD  
ON CHECKLIST ITEM 7

## I. INTRODUCTION

On February 12, 2002, AT&T Communications of the Mountain States, Inc. and TCG Phoenix (collectively "AT&T") filed a Motion to Reopen and Supplement the Record on Qwest Corporation's Compliance with Checklist Item Number 7. AT&T states in its Motion that since the Commission entered two Orders concluding that Qwest has satisfied the requirements of Checklist Item 7, AT&T has experienced a problem updating the E911 database for certain customers who take advantage of the local number portability ("LNP") option. LNP allows a customer to change local service providers while retaining his or her telephone number. Staff files the following response to AT&T's Motion and recommendation for resolution of this issue.

## II. BACKGROUND

AT&T states in its Motion that the problem in most of the cases where it is unable to update customer information in the E911 database stems from Qwest's failure to release or "unlock" the number at the time it is ported to AT&T. Comments at p. 2. AT&T states that if Qwest fails to unlock the number, the new carrier ("AT&T") does not have authorization to update information in the database. Id. AT&T goes on to state that the practical effect of this problem is that when the customer places a call to 911, the operator may send emergency service personnel to the wrong location because the customer information in the database is not current. Motion at pp. 2-3. AT&T states that until Qwest implements a process that ensures that it unlocks numbers at the time the

1 number is ported to AT&T or any other CLEC, it will continue to endanger customers, place AT&T  
2 at a competitive disadvantage and violate the terms of Section 271 of the Act. Motion at p. 4.  
3 AT&T further states that such 911 access is necessary both to ensure customer safety and to provide  
4 CLECs with a meaningful opportunity to compete against ILECs, such as Qwest. Id.1

5 AT&T also stated that according to its records in 2001, it received reject messages for more  
6 than 1,700 Arizona numbers when it tried to update the ALI database. Motion at p. 5. AT&T  
7 alleged that its own investigation revealed that more than 99% of the reject messages received before  
8 November 2001 were attributable to Qwest's failure to unlock the ported number in the ALI  
9 database. Id. Of these, AT&T stated that more than 1,000 remained locked for over 90 days. Id.  
10 In December, 2001, AT&T stated that it received reject messages on at least 569 numbers and as  
11 of January 29, 2002, at least 222 numbers ported to AT&T remained locked in the ALI database for  
12 more than 30 days. Motion at p. 6.

13 AT&T states that it is placed at a significant competitive disadvantage because it incurs costs  
14 associated with investigating hundreds and hundreds of these messages. Motion at p. 7. AT&T also  
15 claims that it is unable to obtain penalties against Qwest because there are no performance measures  
16 that evaluate how and when Qwest unlocks access to the ALI database. Id. Additionally, customers  
17 who experience problems are likely to blame AT&T and switch back to Qwest as a result. Id.

18 Qwest filed a Verified Response to AT&T's Motion on February 22, 2002. Qwest stated that  
19 it does not dispute the importance of ensuring that 911/E911 services are provided reliably and in  
20 a nondiscriminatory fashion. Qwest Response at p. 2. Qwest further stated that based upon records  
21 Qwest has obtained from Intrado, AT&T does not have "hundreds" of locked records that it is unable  
22 to update. Response at p. 2. Qwest stated that AT&T has only 9 records that are locked to Qwest.  
23 Id. Of the total 37 locked AT&T records, Qwest states that roughly 65% are for numbers that have  
24 not yet been ported. This occurs when AT&T does not complete the provisioning work for a variety

---

25 1 AT&T explained the problem as follows: "When a customer switches to AT&T for local service and wishes to keep  
26 the same telephone number, AT&T feeds appropriate customer information into its internal databases. AT&T uses this  
27 information to send an LNP order to Qwest to have the number ported or cutover to AT&T and to send information to  
28 Intrado, the company that manages Qwest's Automatic Location Identifier Database ("ALI"). Qwest is then responsible  
for a series of events, including porting the number to AT&T at a specified time and sending instructions to Intrado to  
unlock the customer's number so that AT&T can become the "owner" of the customer's 911 record and, in turn, so that  
AT&T may update the customer's 911 information." Motion at p. 4.

1 or reasons: i.e., the customer cancelled the order, the customer delayed the due date, or AT&T  
2 personnel were unable to complete their provisioning of the service. Id. For four of the locked  
3 records, Qwest states that the records are locked to another CLEC, not Qwest. Id. Only 9 records  
4 that have been ported are locked to Qwest, and Qwest has asked Intrado to unlock those records. Id.

5 Qwest also stated that it is in the process of implementing December 2001 draft  
6 recommendations of the National Emergency Number Association ("NENA") to address locked  
7 records. Id. Qwest further stated that it has contracted with Intrado to implement the NENA-  
8 recommended process to unlock Qwest records based on validation in NeuStar's number portability  
9 database that the CLEC has activated the number port. Qwest Response at pp. 2-3. Finally, Qwest  
10 states that it has demonstrated its commitment to provide 911/E911 services in a reliable and  
11 nondiscriminatory manner and is already implementing an industry-recommended process to address  
12 locked records. Qwest Response at p. 3.

13 Qwest also stated that for facilities-based CLECs with their own switching facilities, Intrado  
14 has instituted an industry-developed procedure for ensuring that records are not removed from the  
15 ALI or E911 database when a customer changes carriers. Qwest Response at p. 4. Instead of  
16 removing the customer record when Qwest sends a disconnect, order indicating that an end user has  
17 changed service providers, Intrado "unlocks" the record in the ALI database. Id. The new service  
18 provider then sends a corresponding connect order to Intrado that "locks" the record and makes the  
19 new service provider responsible for the record. Id.

20 In addition, Qwest states that it has contracted with Intrado to revise the error code process  
21 in response to draft industry recommendations. Id. Under the new process, the first time a error  
22 code occurs, Intrado will validate that the port has been activated and upon validation, immediately  
23 unlock the Qwest record to process the migrate order. Qwest Response at p. 4. Under the new  
24 process, only unsuccessful migrates, such as where Intrado finds that the new service provider has  
25 not activated the service, will be returned to the new service provider for investigation. Id.

26 Finally, Qwest states that it is important to understand that the industry process for migrate-  
27 type orders was designed to ensure that no E911 record is removed from the E911 database if a  
28 customer changes carriers. Id. Further the process does not affect an end user's ability to dial 911

1 and reach the PSAP for assistance. Id.

2 In its Reply, AT&T states that its records show that as of February 25, 2002, it has more than  
3 250 numbers that Qwest has failed to unlock. Reply at pp. 1-2. AT&T also stated that Qwest has  
4 eliminated consideration of information on 911 database updates for facilities based carriers such  
5 as AT&T in the presentation of its data, so that no analysis has been done to determine the scope of  
6 this problem. Reply at p. 2. AT&T also claims that chronic unlock problems are still occurring at  
7 the rate of about one hundred per month in Arizona. Id. AT&T argues that Intrado's solution is  
8 manual, delaying the unlocking of the CLEC's customer's data, is untested, and does not solve the  
9 underlying cause of the 911 unlock problem. Id. AT&T claims that the underlying problem is that  
10 Qwest is not sending a message to unlock the 911 database when a number is ported as it is supposed  
11 to do under national standards. In fact, according to AT&T, Qwest waits to send the message for  
12 months. AT&T Reply at p. 3. In these situations, AT&T claims that it is not able to change its  
13 customers' information in the 911 database, causing potentially life-threatening situations because  
14 emergency equipment may be sent to the wrong address. Id. AT&T also claims that Qwest's data  
15 severely understates the 911 database problem. AT&T Reply at p. 5. Qwest claims that its data from  
16 Intrado shows that only 9 numbers were locked to Qwest, but according to AT&T, Qwest gave no  
17 time period for this information. Id. AT&T states that it continues to receive approximately 100  
18 orders with unlock problems every week in Arizona, with a majority of those errors caused by  
19 Qwest. Reply at p. 6.

20 AT&T also states that Qwest's solution has some serious problems. First, it is Qwest's  
21 responsibility to send an unlock message. Second, Intrado has no legal obligation to perform this  
22 function under Qwest's interconnection agreements, the SGAT, FCC provisions or under the Act.  
23 Reply at pp. 7-8. Third, the process Qwest describes is highly manual and adds a delay that Qwest  
24 does not experience when it updates the 911 database for its retail customers. Reply at p. 8. Finally,  
25 Qwest's proposed method of cleaning up unlock problems has not been tested. Id.

26 Finally, AT&T states that the two PIDS, DB1-A, Time to Update Databases, and DB-2,  
27 Accurate Database Updates, do not accurately capture Qwest's poor performance in failing to unlock  
28 the 911 database in a timely manner. Reply at pp. 8-9. AT&T states that Qwest may only be

1 evaluating its retail results and its performance for CLECs ordering resold services, not facilities  
2 based CLEC results. Reply at p. 9.

3 In its Verified Surreply, Qwest stated that its investigations revealed that it was not Qwest  
4 that has failed in its responsibility to unlock records that is causing many of the problems, but it is  
5 AT&T's failure to determine the status of its number port activities before it asks for an unlock that  
6 has led to many of the errors AT&T receives. Surreply at p. 4. Qwest's investigation indicated that  
7 some of the problems were due to the records being locked to another service provider and to AT&T  
8 not having completed provisioning of the services. Id. Thus, in many cases Qwest claims it is not  
9 at fault. Id.

### 10 **III. DISCUSSION AND STAFF RECOMMENDATION**

11 Staff believes that the issue raised by AT&T is very significant and one that must be  
12 addressed. Nonetheless, for the following reasons, Staff does not believe that anything would be  
13 gained by reopening the record and conducting further proceedings on Checklist Item 7. First, as is  
14 apparent from the filings of the parties, this is not just an issue with Qwest. It is a nationwide or  
15 industry-wide problem which is being resolved on a nationwide basis by national standard setting  
16 groups.

17 Second, the issue appears to have been addressed in many respects by the national standard  
18 setting groups, including NENA and the Local Number Portability Administration Working Group,  
19 and Qwest has been proactive in adopting the process agreed upon in those standard setting groups.  
20 Qwest noted that in its December 2001 meeting, NENA reached agreement on a draft standard  
21 recommendation for handling the unlocking of records by database administrators so that the migrate  
22 orders from the new service provider can be handled in a more timely manner. The draft NENA  
23 standard is currently in the approval process by the NENA membership. Qwest also pointed out that  
24 Intrado has implemented this new process on February 25, 2002. Under the new process, if the new  
25 service provider's E911 database update is unsuccessful due to a locked record, Intrado will access  
26 the LNP database, to determine if the new service provider has activated the port. If the CLEC has  
27 activated the port subscription in the NPAC, Intrado will then unlock the record and process the  
28 migrate order to update the E911 database. Intrado has a dedicated team assigned to perform this

1 function. Staff believes the important point is that Qwest has implemented NENA-recommended  
2 processes for addressing record locks/unlocks.

3 Third, most of the disagreement between AT&T and Qwest appears to have come down to  
4 one of "dueling data"; and who is ultimately responsible for the problems experienced by AT&T  
5 with 911 database accuracy with ported numbers. It is apparent that the problem is not one that  
6 resides solely with Qwest. Qwest's own investigation revealed many problems over which it had  
7 no control. For instance, the CLECs may not have ported the number or the records may belong to  
8 a carrier other than Qwest, and that other carrier (not Qwest) would then have the responsibility to  
9 unlock the number. This is not to minimize Qwest's responsibility to unlock numbers on a timely  
10 basis, but merely to point out that the problem is a joint problem between the company that currently  
11 owns an account and the company that has won the account. Both companies have to notify Intrado  
12 that the number port is taking place. If one fails for some reason, a problem is created.

13 AT&T expresses serious reservation with the NENA recommendation and agreed upon  
14 process. However, the concerns expressed by AT&T are not ones that could be productively  
15 addressed in a 271 workshop. AT&T states that Intrado has no legal obligation to perform this  
16 function under Qwest's interconnection agreements, the SGAT, FCC provisions or under the Act.

17 Staff notes that it assumes that Qwest has its own separate contractual arrangement with Intrado in  
18 which Intrado agrees to perform this function. Notwithstanding, Qwest would ultimately remain  
19 responsible to ensure that its numbers are unlocked on a timely basis. Staff does not believe that  
20 this issue comes down to one of the proprietary of Qwest contracting with a third party to perform  
21 this function; as this is standard operating practice in the industry as a whole. The issue comes down  
22 to whether the process with Intrado (which incorporates the new NENA standards) will resolve the  
23 911 locking/unlocking problems now being experienced by the industry as a whole. Staff believes  
24 that the new process and new NENA standards will solve a lot of the current problems with locking  
25 and unlocking of 911 numbers. The industry has also reached consensus in the NENA that this  
26 process will alleviate locking and unlocking issues for all carriers.

27 Moreover, Qwest stated that it has learned from Intrado that since implementation of its  
28 solution, Intrado has investigated the unsuccessful migrates and when valid (i.e., the port activation

1 is complete), cleared all migrate records submitted each day. Qwest also noted in its Surreply that  
2 on March 5, 2002, AT&T informed Qwest during hearings in Minnesota that AT&T had submitted  
3 hundreds of numbers to Intrado for unlocking to "test" the Intrado process." According to Qwest,  
4 the "test" demonstrated that the Intrado process was indeed working. Thus, Staff believes that  
5 AT&T's concerns that the process "Qwest describes is highly manual and adds a delay that Qwest  
6 does not experience when it updates the 911 database for its retail customers", and that "Qwest's  
7 proposed method has not been tested" do not have merit.

8         Nonetheless, as a result of AT&T having brought this concern to light, Staff believes that  
9 several issues have been raised which merit further review. First, Staff recommends that Qwest's  
10 SGAT be revised to incorporate a provision which details the process for Intrado to unlock the Qwest  
11 numbers when it is determined by Intrado that the service provider (CLEC) has activated the port.  
12 Qwest should be required to propose SGAT language within 10 days which details the process to  
13 be used by Intrado and which obligates Qwest and the CLECs to follow and implement future NENA  
14 standards pertaining to 911. Qwest should also be required to include such provisions in its  
15 interconnection agreements on a going forward basis.

16         While Qwest has agreed to the NENA process and has contracted with Intrado to implement  
17 it, the data also indicated a problem with CLECs which also have numbers locked to them which  
18 were not being unlocked on a timely basis. Intrado has agreed to unlock a CLEC's customer records  
19 under this process, for no additional charge, if authorized to do so by the CLEC. CLEC  
20 authorization should not be a problem with future interconnection agreements where these provisions  
21 can be included.

22         A problem arises however, in that many CLECs are operating under interconnection  
23 agreements with no provision of this nature. Staff believes that since a condition is contained in all  
24 CC&Ns which obligates the carrier to follow NENA guidelines on 911, this should be sufficient.  
25 However, Qwest should notify Staff if Intrado still requires actual CLEC authorization, and Staff  
26 will initiate a separate process to address this issue. Staff believes a separate process to address this  
27 issue outside of the 271 proceeding is appropriate since this involves the obligations of CLECs.

28         AT&T also raised an issue regarding the database PIDs not being useful in measuring

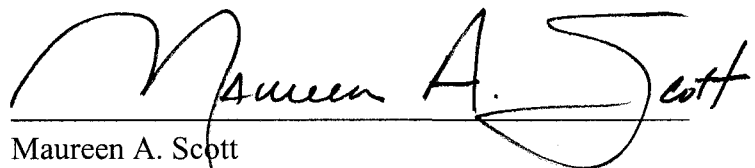
1 Qwest's performance since they only report on Qwest sending the information to Intrado. In general,  
2 new PIDs have been addressed in the 271 Test Advisory Group ("TAG"). AT&T is free to raise this  
3 issue in the TAG and propose the adoption of a new PID to measure Qwest's performance relative  
4 to 911 database accuracy.

5 Finally, Intrado furnishes a report to all carriers on their performance. The report is required  
6 by the SGAT and is entitled "Unsuccessful Migrate Report". The report should furnish information  
7 that would indicate if a problem exists and the nature of any problem. Staff believes that the reports  
8 produced by Intrado and provided to each CLEC should also be provided to the Commission Staff  
9 since a problem may come to light which may need Commission intervention.

#### 10 **IV. CONCLUSION**

11 In summary, Staff recommends that AT&T's Motion to Reopen and Supplement the Record  
12 on Checklist Item 7 be denied.

13  
14 RESPECTFULLY submitted this 5<sup>th</sup> day of April, 2002.

15  
16  
17 

18 Maureen A. Scott  
19 Attorney, Legal Division  
20 Arizona Corporation Commission  
21 1200 West Washington Street  
22 Phoenix, Arizona 85007  
23 Telephone: (602) 542-6022  
24 Facsimile: (602) 542-5870  
25 e-mail: [maureenscott@cc.state.az.us](mailto:maureenscott@cc.state.az.us)  
26  
27  
28



Original and **ten** copies of the foregoing  
were filed this 5<sup>th</sup> day of March, 2002, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, AZ 85007

Copies of the foregoing were mailed and/or  
hand-delivered this 5<sup>th</sup> day of March, 2002, to:

Charles Steese  
Andrew Crain  
Qwest Communications, Inc.  
1801 California Street, #5100  
Denver, Colorado 80202

Maureen Arnold  
QWEST Communications, Inc.  
3033 N. Third Street, Room 1010  
Phoenix, Arizona 85012

Michael M. Grant  
Gallagher and Kennedy  
2575 E. Camelback Road  
Phoenix, Arizona 85016-9225

Timothy Berg  
FENNEMORE CRAIG  
3003 N. Central Ave., Suite 2600  
Phoenix, Arizona 85016

Nigel Bates  
Electric Lightwave, Inc.  
4400 NE 77<sup>th</sup> Avenue  
Vancouver, Washington 98662

Brian Thomas, VP Reg. - West  
Time Warner Telecom, Inc.  
520 SW 6<sup>th</sup> Avenue, Suite 300  
Portland, Oregon 97204

Richard P. Kolb, VP-Reg. Affairs  
OnePoint Communications  
Two Conway Park  
150 Field Drive, Suite 300  
Lake Forest, Illinois 60045

Eric S. Heath  
Sprint Communications Co.  
100 Spear Street, Suite 930  
San Francisco, CA 94105

Thomas H. Campbell  
LEWIS & ROCA  
40 N. Central Avenue  
Phoenix, Arizona 85007

Andrew O. Isar  
TRI  
4312 92<sup>nd</sup> Avenue, N.W.  
Gig Harbor, Washington 98335

Michael W. Patten  
Roshka Heyman & DeWulf  
One Arizona Center  
400 East Van Buren, Suite 800  
Phoenix, Arizona 85004

Charles Kallenbach  
American Communications Services Inc  
131 National Business Parkway  
Annapolis Junction, Maryland 20701

Thomas F. Dixon  
MCI Telecommunications Corp  
707 17th Street, #3900  
Denver, Colorado 80202

Kevin Chapman  
Director-Regulatory Relations  
SBC Telecom, Inc.  
300 Convent Street, Rm. 13-Q-40  
San Antonio, TX 78205

|    |  |   |
|----|--|---|
| 1  | Richard S. Wolters                           | Gena Doyscher                                 |
| 2  | AT&T & TCG                                   | Global Crossing Local Services, Inc.          |
| 3  | 1875 Lawrence Street, Room 1575              | 1221 Nicollet Mall                            |
|    | Denver, Colorado 80202                       | Minneapolis, MN 55403-2420                    |
| 4  | Joyce Hundley                                | Karen L. Clauson                              |
| 5  | United States Department of Justice          | ESCHELON TELECOM, INC.                        |
| 6  | Antitrust Division                           | 730 Second Avenue South, Suite 1200           |
| 7  | 1401 H Street NW, Suite 8000                 | Minneapolis, MN 55402                         |
| 8  | Washington, DC 20530                         |   |
| 9  | Joan Burke                                   | Mark P. Trinchero                             |
| 10 | Osborn Maledon                               | Davis, Wright Tremaine                        |
| 11 | 2929 N. Central Avenue, 21st Floor           | 1300 SW Fifth Avenue, Suite 2300              |
| 12 | P.O. Box 36379                               | Portland, OR 97201                            |
| 13 | Phoenix, Arizona 85067-6379                  |   |
| 14 | Scott S. Wakefield, Chief Counsel            | Traci Grundon                                 |
| 15 | RUCO   | Davis, Wright & Tremaine LLP                  |
| 16 | 2828 N. Central Avenue, Suite 1200           | 1300 S.W. Fifth Avenue                        |
| 17 | Phoenix, Arizona 85004                       | Portland, OR 97201                            |
| 18 | Rod Aguilar                                  | Bradley Carroll, Esq.                         |
| 19 | AT&T   | COX ARIZONA TELCOM, L.L.C.                    |
| 20 | 795 Folsom St., #2104                        | 20401 North 29 Avenue                         |
| 21 | San Francisco, CA 94107-1243                 | Phoenix, AZ 85027                             |
| 22 | Daniel Waggoner                              | Mark N. Rogers                                |
| 23 | DAVIS WRIGHT TREMAINE                        | Excell Agent Services, L.L.C.                 |
| 24 | 2600 Century Square                          | 2175 W. 14 <sup>th</sup> Street               |
| 25 | 1501 Fourth Avenue                           | Tempe, AZ 85281                               |
| 26 | Seattle, WA 98101-1688                       |   |
| 27 | Raymond S. Heyman                            | Barbara P. Shever                             |
| 28 | ROSHKA HEYMAN & DeWULF                       | LEC Relations Mgr.-Industry Policy            |
|    | One Arizona Center                           | Z-Tel Communications, Inc.                    |
|    | 400 East Van Buren, Suite 800                | 601 S. Harbour Island Blvd., Suite 220        |
|    | Phoenix, Arizona 85004                       | Tampa, FL 33602                               |
|    | Diane Bacon, Legislative Director            | Jonathan E. Canis                             |
|    | COMMUNICATIONS WORKERS OF                    | Michael B. Hazzard                            |
|    | AMERICA                                      | Kelly Drye & Warren L.L.P.                    |
|    | 5818 North 7 <sup>th</sup> Street, Suite 206 | 1200 19 <sup>th</sup> Street, NW, Fifth Floor |
|    | Phoenix, Arizona 85014-5811                  | Washington, D.C. 20036                        |
|    |  | Ms. Andrea P. Harris                          |
|    |  | Sr. Manager, Reg.                             |
|    |  | ALLEGIANCE TELECOM, INC.                      |
|    |  | 2101 Webster, Suite 1580                      |
|    |  | Oakland, California 94612                     |

1 Dennis D. Ahlers, Sr. Attorney  
2 Eschelon Telecom, Inc.  
3 730 Second Ave. South, Ste. 1200  
4 Minneapolis, MN 55402  
5 Garry Appel, Esq.  
6 TESS Communications, Inc.  
7 1917 Market Street  
8 Denver, CO 80202

9 Todd C. Wiley Esq. for  
10 COVAD Communications Co.  
11 GALLAGHER AND KENNEDY  
12 2575 East Camelback Road  
13 Phoenix, Arizona 85016-9225

14 K. Megan Doberneck, Esq. for  
15 COVAD Communications Co.  
16 7901 Lowry Blvd  
17 Denver, CO 80230

18 Steven J. Duffy  
19 Ridge & Isaacson P.C.  
20 3101 N. Central Ave., Suite 1090  
21 Phoenix, AZ 85012-2638

22  
23  
24  
25  
26  
27  
28  
29  
30  
31  
32  
33  
34  
35  
36  
37  
38  
39  
40  
41  
42  
43  
44  
45  
46  
47  
48  
49  
50  
51  
52  
53  
54  
55  
56  
57  
58  
59  
60  
61  
62  
63  
64  
65  
66  
67  
68  
69  
70  
71  
72  
73  
74  
75  
76  
77  
78  
79  
80  
81  
82  
83  
84  
85  
86  
87  
88  
89  
90  
91  
92  
93  
94  
95  
96  
97  
98  
99  
100  
101  
102  
103  
104  
105  
106  
107  
108  
109  
110  
111  
112  
113  
114  
115  
116  
117  
118  
119  
120  
121  
122  
123  
124  
125  
126  
127  
128  
129  
130  
131  
132  
133  
134  
135  
136  
137  
138  
139  
140  
141  
142  
143  
144  
145  
146  
147  
148  
149  
150  
151  
152  
153  
154  
155  
156  
157  
158  
159  
160  
161  
162  
163  
164  
165  
166  
167  
168  
169  
170  
171  
172  
173  
174  
175  
176  
177  
178  
179  
180  
181  
182  
183  
184  
185  
186  
187  
188  
189  
190  
191  
192  
193  
194  
195  
196  
197  
198  
199  
200  
201  
202  
203  
204  
205  
206  
207  
208  
209  
210  
211  
212  
213  
214  
215  
216  
217  
218  
219  
220  
221  
222  
223  
224  
225  
226  
227  
228  
229  
230  
231  
232  
233  
234  
235  
236  
237  
238  
239  
240  
241  
242  
243  
244  
245  
246  
247  
248  
249  
250  
251  
252  
253  
254  
255  
256  
257  
258  
259  
260  
261  
262  
263  
264  
265  
266  
267  
268  
269  
270  
271  
272  
273  
274  
275  
276  
277  
278  
279  
280  
281  
282  
283  
284  
285  
286  
287  
288  
289  
290  
291  
292  
293  
294  
295  
296  
297  
298  
299  
300  
301  
302  
303  
304  
305  
306  
307  
308  
309  
310  
311  
312  
313  
314  
315  
316  
317  
318  
319  
320  
321  
322  
323  
324  
325  
326  
327  
328  
329  
330  
331  
332  
333  
334  
335  
336  
337  
338  
339  
340  
341  
342  
343  
344  
345  
346  
347  
348  
349  
350  
351  
352  
353  
354  
355  
356  
357  
358  
359  
360  
361  
362  
363  
364  
365  
366  
367  
368  
369  
370  
371  
372  
373  
374  
375  
376  
377  
378  
379  
380  
381  
382  
383  
384  
385  
386  
387  
388  
389  
390  
391  
392  
393  
394  
395  
396  
397  
398  
399  
400  
401  
402  
403  
404  
405  
406  
407  
408  
409  
410  
411  
412  
413  
414  
415  
416  
417  
418  
419  
420  
421  
422  
423  
424  
425  
426  
427  
428  
429  
430  
431  
432  
433  
434  
435  
436  
437  
438  
439  
440  
441  
442  
443  
444  
445  
446  
447  
448  
449  
450  
451  
452  
453  
454  
455  
456  
457  
458  
459  
460  
461  
462  
463  
464  
465  
466  
467  
468  
469  
470  
471  
472  
473  
474  
475  
476  
477  
478  
479  
480  
481  
482  
483  
484  
485  
486  
487  
488  
489  
490  
491  
492  
493  
494  
495  
496  
497  
498  
499  
500  
501  
502  
503  
504  
505  
506  
507  
508  
509  
510  
511  
512  
513  
514  
515  
516  
517  
518  
519  
520  
521  
522  
523  
524  
525  
526  
527  
528  
529  
530  
531  
532  
533  
534  
535  
536  
537  
538  
539  
540  
541  
542  
543  
544  
545  
546  
547  
548  
549  
550  
551  
552  
553  
554  
555  
556  
557  
558  
559  
560  
561  
562  
563  
564  
565  
566  
567  
568  
569  
570  
571  
572  
573  
574  
575  
576  
577  
578  
579  
580  
581  
582  
583  
584  
585  
586  
587  
588  
589  
590  
591  
592  
593  
594  
595  
596  
597  
598  
599  
600  
601  
602  
603  
604  
605  
606  
607  
608  
609  
610  
611  
612  
613  
614  
615  
616  
617  
618  
619  
620  
621  
622  
623  
624  
625  
626  
627  
628  
629  
630  
631  
632  
633  
634  
635  
636  
637  
638  
639  
640  
641  
642  
643  
644  
645  
646  
647  
648  
649  
650  
651  
652  
653  
654  
655  
656  
657  
658  
659  
660  
661  
662  
663  
664  
665  
666  
667  
668  
669  
670  
671  
672  
673  
674  
675  
676  
677  
678  
679  
680  
681  
682  
683  
684  
685  
686  
687  
688  
689  
690  
691  
692  
693  
694  
695  
696  
697  
698  
699  
700  
701  
702  
703  
704  
705  
706  
707  
708  
709  
710  
711  
712  
713  
714  
715  
716  
717  
718  
719  
720  
721  
722  
723  
724  
725  
726  
727  
728  
729  
730  
731  
732  
733  
734  
735  
736  
737  
738  
739  
740  
741  
742  
743  
744  
745  
746  
747  
748  
749  
750  
751  
752  
753  
754  
755  
756  
757  
758  
759  
760  
761  
762  
763  
764  
765  
766  
767  
768  
769  
770  
771  
772  
773  
774  
775  
776  
777  
778  
779  
780  
781  
782  
783  
784  
785  
786  
787  
788  
789  
790  
791  
792  
793  
794  
795  
796  
797  
798  
799  
800  
801  
802  
803  
804  
805  
806  
807  
808  
809  
810  
811  
812  
813  
814  
815  
816  
817  
818  
819  
820  
821  
822  
823  
824  
825  
826  
827  
828  
829  
830  
831  
832  
833  
834  
835  
836  
837  
838  
839  
840  
841  
842  
843  
844  
845  
846  
847  
848  
849  
850  
851  
852  
853  
854  
855  
856  
857  
858  
859  
860  
861  
862  
863  
864  
865  
866  
867  
868  
869  
870  
871  
872  
873  
874  
875  
876  
877  
878  
879  
880  
881  
882  
883  
884  
885  
886  
887  
888  
889  
890  
891  
892  
893  
894  
895  
896  
897  
898  
899  
900  
901  
902  
903  
904  
905  
906  
907  
908  
909  
910  
911  
912  
913  
914  
915  
916  
917  
918  
919  
920  
921  
922  
923  
924  
925  
926  
927  
928  
929  
930  
931  
932  
933  
934  
935  
936  
937  
938  
939  
940  
941  
942  
943  
944  
945  
946  
947  
948  
949  
950  
951  
952  
953  
954  
955  
956  
957  
958  
959  
960  
961  
962  
963  
964  
965  
966  
967  
968  
969  
970  
971  
972  
973  
974  
975  
976  
977  
978  
979  
980  
981  
982  
983  
984  
985  
986  
987  
988  
989  
990  
991  
992  
993  
994  
995  
996  
997  
998  
999  
1000

Viola R. Kizis  
Secretary to Maureen A. Scott